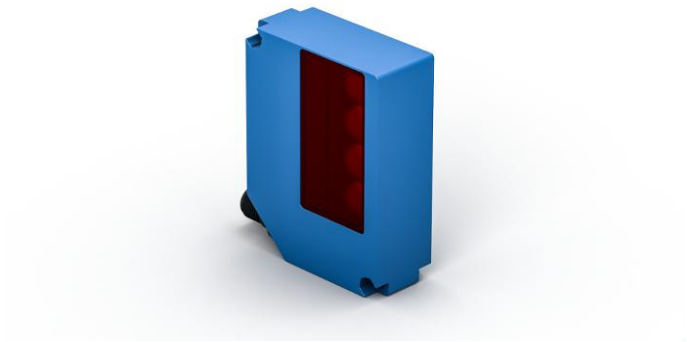
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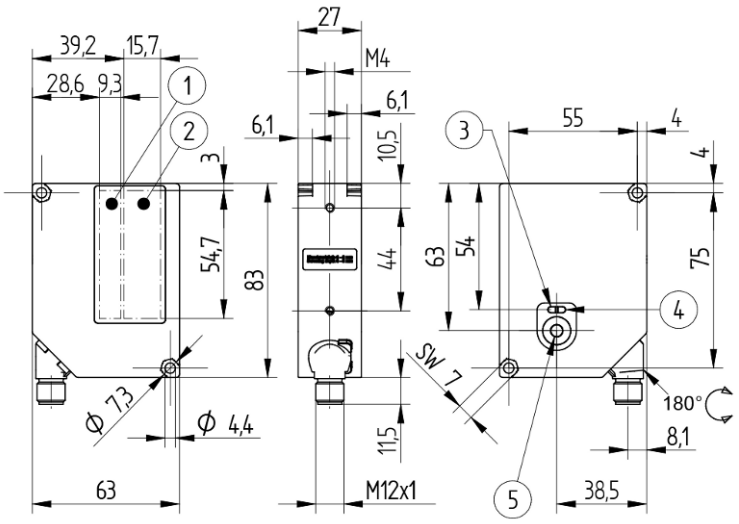
Technical Data

P1EL301

Retro-Reflex Sensor

with light band





Symbol	Key
1	Emitters
2	Receiver diode
3	Power LED
4	Switching status indicator/contamination warning
5	Teach-in button

EN

Dimensions in mm
Subject to change without notice
Version 0
www.wenglor.com

Technical data

Optical Data	
Range	2500 mm
Reference Reflector/Reflector Foil	Z90R009
Smallest Recognizable Part	see table
Light Source	Laser, red
Light spot geometry	Belt
Wavelength	650 nm
Service Life (T = +25 °C)	100000 h
Laser Class (EN 60825-1)	1
Max. Ambient Light	10000 Lux
Light Strip Height	54 mm

Electrical Data	
Supply Voltage	12...30 V DC
Current Consumption (Ub = 24 V)	< 30 mA
Switching Frequency	125 Hz
Response Time	4 ms
Temperature Range	-30...60 °C
Switching Output Voltage Drop	< 2.5 V
PNP Switching Output/Switching Current	100 mA
Residual Current Switching Output	< 50 µA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Protection Class	III
FDA Accession Number	2310248-000

Mechanical Data	
Setting Method	Teach-In
Housing Material	Plastic, ABS-GF Plastic, PC
Degree of Protection	IP67 IP68
Connection Type	Plug variant
Connection	M12 × 1; 4-pin
Optic Cover	Plastic, PMMA

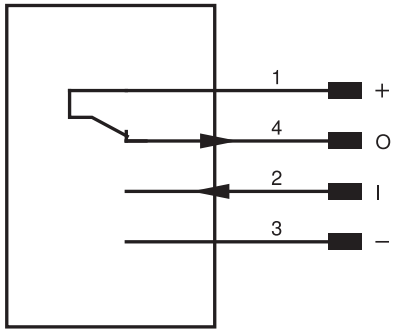
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	1599.51 a

General Data	
Scope of delivery	1 × Z1PE002 mounting set 1 × initial start-up instructions 1 × sensor

All other parameters can be found in the product documentation.

BMECat data	
eCl@ss 5.1.4	27-27-09-04 Light scanner w. background masking
eCl@ss 6.x	27-27-09-04 Light scanner w. background masking
eCl@ss 7.0	27-27-09-04 Light scanner w. background masking
eCl@ss 7.1	27-27-09-04 Light scanner w. background masking
eCl@ss 8.x	27-27-09-04 Light scanner w. background masking
eCl@ss 10.0.1	27-27-09-04 Light scanner w. background masking

Technical illustrations



Pin	Pin function	Polarity	Circuit
1	Supply Voltage +		
2		High activ	
3	Supply voltage 0 V		
4	Switching output	PNP	NC

Table 1		
Distance, Sensor to Reflector	0,40 ... 1,60 m	1,60 ... 2,50 m
Smallest Recognizable Part	4 mm	10 mm

Reflector data	
Z90R009	0.4...2.5 m
ZRDF03K01	0.4...1.6 m
ZRDF10K01	0.4...1.6 m

Reflector type, mounting distance